

REMARKS

Claims 1, 4, 10, 13 and 16 stand rejected under § 102 on the basis of Chaudhuri et al. '171. Independent claims 1, 10, 13 and 16 have been amended to better define the invention over the cited reference. Applicants traverse this rejection because the reference does not disclose (or suggest) a method for retrieving data from a database that makes a cost comparison between retrieval with an index, and retrieval without an index, when the database is in use, not during development or maintenance.

Chaudhuri '171 merely discloses a tool which a database designer or administrator may use to test the effects that different indexing schemes would have on the cost of processing one or more workloads which have been chosen as typical of the work the database is used to perform. Chaudhuri '171, column 4, lines 16-24 state:

What-if index analysis utility in accordance with the current invention may be used to perform quantitative analyses of a database system. What-if index analysis utility may be used, for example, to analyze the performance of the existing configuration of the database system with respect to one or more workloads of queries and to propose a hypothetical configuration for the database system and to analyze its potential impact on the performance of the database system.

In contrast, the present invention analyzes the cost of performing an actual retrieval operation with and without an index, then generates the index before performing the operation if that is found to be the less costly approach. Chaudhuri '171 also is limited to

comparing the cost of operation with different sets of indexes, while the present invention compares the cost of operation with an index to the cost without the index. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1, 10, 13 and 16 stand rejected under § 102 on the basis of Tenorio et al. '048. The rejected claims have been amended to better define the invention over this reference. Applicants traverse this rejection because Tenorio does not disclose (or suggest) retrieval conditions set forth in an issued SQL sentence, as in the present invention. Tenorio discloses a method by which a database management system builds indexes to an open-ended set of vendors' databases according to queries which buyers perform on those databases. It does not refer to queries issued in the form of SQL sentences. On the contrary, such queries would typically take the form of free-form search strings issued to a search function in each vendor's server. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-2, 4-7, 10-11, 13-14 and 16 stand rejected under § 102 on the basis of Smith '510. The rejected independent claims have been amended to overcome this rejection. Applicants traverse this rejection because Smith does not disclose (or suggest) analyzing the cost of performing a requested retrieval operation with or without an index and creating the index if the analysis indicates that doing so will reduce the total cost of the operation. Smith merely teaches a method by which indexes are optimized with reference to the database's entire workload, not a specific retrieval operation, and furthermore, by which indexes are optimized during the design process, not during use. Smith, column 2, lines 25-29 state:

The indexes are identified based on a detailed analysis of the workload, with weight given to the importance of specific requests. Once the indexes are identified, the system may then design [sic, be designed] for other physical features of the database.

Withdrawal of this rejection is requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 

Patrick G. Burns
Registration No. 29,367

August 10, 2004

300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
Telephone: 312.360.0080
Facsimile: 312.360.9315
Customer No. 24978